

What is claimed is:

- 1     1.     A machine-implemented method, comprising:  
2             parsing a man page that is associated with a specified command line interface (CLI)  
3             command;  
4             based on the man page, automatically generating a description document that  
5             describes the syntax of the specified CLI command; and  
6             making the description document accessible to one or more remote systems to enable  
7             the one or more remote systems to create remote invocation messages based  
8             on the description document.
- 1     2.     The method of claim 1, wherein the description document is a Web Services  
2             Description Language (WSDL) document.
- 1     3.     The method of claim 1, wherein:  
2             parsing the man page comprises determining, from the man page, a name of the  
3             specified command; and  
4             automatically generating the description document comprises generating a portion of  
5             the description document that contains the name of the specified command as  
6             indicated by the man page.
- 1     4.     The method of claim 1, wherein:  
2             parsing the man page comprises determining, from the man page, one or more options  
3             that may be specified in association with the specified command; and

4 automatically generating the description document comprises generating, for each  
 5 particular option of the one or more options, a separate portion of the  
 6 description document that indicates the particular option.

1 5. The method of claim 1, wherein:  
 2 parsing the man page comprises determining, from the man page, a directory path to a  
 3 program that implements the specified command; and  
 4 automatically generating the description document comprises generating a portion of  
 5 the description document that indicates the directory path.

1 6. The method of claim 1, wherein:  
 2 parsing the man page comprises determining, from the man page, one or more formal  
 3 parameters that may be specified in association with the specified command;  
 4 and  
 5 automatically generating the description document comprises generating, for each  
 6 particular formal parameter of the one or more formal parameters, a separate  
 7 portion of the description document that indicates the particular formal  
 8 parameter.

1 7. The method of claim 1, further comprising:  
 2 receiving a remote invocation message that represents an invocation of the specified  
 3 CLI command, wherein the remote invocation message was generated by at  
 4 least one of the one or more remote systems based on the description  
 5 document; and  
 6 executing the CLI command indicated in the remote invocation message.

1 8. The method of claim 7, wherein the remote invocation message is a Simple Object  
2 Access Protocol (SOAP) message.

1 9. A machine-readable medium, comprising:  
2 instructions for causing one or more processors to parse a man page that is associated  
3 with a specified command line interface (CLI) command;  
4 instructions for causing one or more processors to automatically generate, based on  
5 the man page, a description document that describes the syntax of the  
6 specified CLI command; and  
7 instructions for causing one or more processors to make the description document  
8 accessible to one or more remote systems to enable the one or more remote  
9 systems to create remote invocation messages based on the description  
10 document.

1 10. The machine-readable medium of claim 9, wherein the description document is a  
2 Web Services Description Language (WSDL) document.

1 11. The machine-readable medium of claim 9, wherein:  
2 the instructions for causing one or more processors to parse the man page comprise  
3 instructions for causing one or more processors to determine, from the man  
4 page, a name of the specified command; and  
5 the instructions for causing one or more processors to automatically generate the  
6 description document comprise instructions for causing one or more  
7 processors to generate a portion of the description document that contains the  
8 name of the specified command as indicated by the man page.

1 12. The machine-readable medium of claim 9, wherein:

2 the instructions for causing one or more processors to parse the man page comprise

3 instructions for causing one or more processors to determine, from the man

4 page, one or more options that may be specified in association with the

5 specified command; and

6 the instructions for causing one or more processors to automatically generate the

7 description document comprise instructions for causing one or more

8 processors to generate, for each particular option of the one or more options, a

9 separate portion of the description document that indicates the particular

10 option.

1 13. The machine-readable medium of claim 9, wherein:

2 the instructions for causing one or more processors to parse the man page comprise

3 instructions for causing one or more processors to determine, from the man

4 page, a directory path to a program that implements the specified command;

5 and

6 the instructions for causing one or more processors to automatically generate the

7 description document comprise instructions for causing one or more

8 processors to generate a portion of the description document that indicates the

9 directory path.

1 14. The machine-readable medium of claim 9, wherein:

2 the instructions for causing one or more processors to parse the man page comprise

3 instructions for causing one or more processors to determine, from the man

4                   page, one or more formal parameters that may be specified in association with  
 5                   the specified command; and  
 6           the instructions for causing one or more processors to automatically generate the  
 7                   description document comprise instructions for causing one or more  
 8                   processors to generate, for each particular formal parameter of the one or  
 9                   more formal parameters, a separate portion of the description document that  
 10                   indicates the particular formal parameter.

1    15.    The machine-readable medium of claim 9, further comprising:  
 2           instructions for causing one or more processors to receive a remote invocation  
 3                   message that represents an invocation of the specified CLI command, wherein  
 4                   the remote invocation message was generated by at least one of the one or  
 5                   more remote systems based on the description document; and  
 6           instructions for causing one or more processors to execute the CLI command  
 7                   indicated in the remote invocation message.

1    16.    The machine-readable medium of claim 15, wherein the remote invocation message is  
 2           a Simple Object Access Protocol (SOAP) message.

1    17.    An apparatus, comprising:  
 2           a mechanism for parsing a man page that is associated with a specified command line  
 3                   interface (CLI) command;  
 4           a mechanism for automatically generating, based on the man page, a description  
 5                   document that describes the syntax of the specified CLI command; and

6 a mechanism for making the description document accessible to one or more remote  
7 systems to enable the one or more remote systems to create remote invocation  
8 messages based on the description document.

1 18. The apparatus of claim 17, wherein the description document is a Web Services  
2 Description Language (WSDL) document.

1 19. The apparatus of claim 17, wherein:  
2 the mechanism for parsing the man page comprises a mechanism for determining,  
3 from the man page, a name of the specified command; and  
4 the mechanism for automatically generating the description document comprises a  
5 mechanism for generating a portion of the description document that contains  
6 the name of the specified command as indicated by the man page.

1 20. The apparatus of claim 17, wherein:  
2 the mechanism for parsing the man page comprises a mechanism for determining,  
3 from the man page, one or more options that may be specified in association  
4 with the specified command; and  
5 the mechanism for automatically generating the description document comprises a  
6 mechanism for generating, for each particular option of the one or more  
7 options, a separate portion of the description document that indicates the  
8 particular option.

1 21. The apparatus of claim 17, wherein:  
2 the mechanism for parsing the man page comprises a mechanism for determining,  
3 from the man page, a directory path to a program that implements the  
4 specified command; and

5       the mechanism for automatically generating the description document comprises a  
6               mechanism for generating a portion of the description document that indicates  
7               the directory path.

1    22.   The apparatus of claim 17, wherein:

2       the mechanism for parsing the man page comprises a mechanism for determining,  
3               from the man page, one or more formal parameters that may be specified in  
4               association with the specified command; and

5       the mechanism for automatically generating the description document comprises a  
6               mechanism for generating, for each particular formal parameter of the one or  
7               more formal parameters, a separate portion of the description document that  
8               indicates the particular formal parameter.

1    23.   The apparatus of claim 17, further comprising:

2       a mechanism for receiving a remote invocation message that represents an invocation  
3               of the specified CLI command, wherein the remote invocation message was  
4               generated by at least one of the one or more remote systems based on the  
5               description document; and

6       a mechanism for executing the CLI command indicated in the remote invocation  
7               message.

1    24.   The apparatus of claim 23, wherein the remote invocation message is a Simple Object  
2       Access Protocol (SOAP) message.